Report Date: January 13, 2016

**Priority 1 Species of Greatest Conservation Need (SGCN)** 

Class: Reptilia (Reptiles)

Order: Testudines (Turtles And Tortoises)

Family: Emydidae (Pond Turtles)

#### General comments:

~350% increase in # of wetlands (~55 to ~250); total population=1-2,000?; new SWH safety net; severe demographic concerns & threats remain; SVP protection; USFWS considering listing New England population as a "Distinct Population Segment" and thus federally Threatened

# **Species Conservation Range Maps for Blanding's Turtle:**

Town Map: <u>Emydoidea blandingii\_Towns.pdf</u>
Subwatershed Map: <u>Emydoidea blandingii\_HUC12.pdf</u>

## **SGCN Priority Ranking - Designation Criteria:**

**Risk of Extirpation:** 

Maine Status: Endangered

**IUCN Red List Status: Endangered** 

State Special Concern or NMFS Species of Concern: NA

**Recent Significant Declines: NA** 

**Regional Endemic: NA** 

**High Regional Conservation Priority:** 

Northeast Endangered Species and Wildlife Diversity Technical Committee:

Risk: Yes, Data: Yes, Area: Yes, Spec: Yes, Warrant Listing: Yes, Total Categories with "Yes": 5

Northeast Partners In Amphibian and Reptile Conservation (NEPARC):

Regional Responsibility:< 50 % US Distribution, Concern: >= 75% of States Listed in WAP

**High Climate Change Vulnerability: NA** 

Understudied rare taxa: NA

**Historical: NA** 

**Culturally Significant: NA** 

# **Habitats Assigned to Blanding's Turtle:**

Formation Name Agricultural

Macrogroup Name Agricultural

Habitat System Name: Pasture-Hay Notes: secondary

Formation Name Developed

Macrogroup Name Extractive

Habitat System Name: Quarries-Pits-Stripmines Notes: secondary as nesting habitat

Formation Name Freshwater Aquatic

Macrogroup Name Lakes and Ponds

**Habitat System Name:** Dystrophic **Notes:** secondary but may be important where wetlands are shallow and have significant emergent herbacious and/or woody vegetation component

**Habitat System Name:** Eutrophic **Notes:** secondary but may be important where wetlands are shallow and have

significant emergent herbacious and/or woody vegetation component

Habitat System Name: Mesotrophic or Intermediate Notes: secondary
Habitat System Name: Vernal Pool \*\*Primary Habitat\*\* Notes: primary

# **Priority 1 Species of Greatest Conservation Need (SGCN)**

Class: Reptilia (Reptiles)

Order: Testudines (Turtles And Tortoises)

Family: Emydidae (Pond Turtles)

Formation Name Freshwater Aquatic

Macrogroup Name Rivers and Streams

**Habitat System Name:** Headwaters and Creeks **Notes:** secondary but may be important where flow is slow and there is

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significant emergent herbacious and woody vegetation

Formation Name Freshwater Marsh

Macrogroup Name Coastal Plain Pond

Habitat System Name: Northern Atlantic Coastal Plain Pond Notes: secondary but may be important where emergent

herbacious and woody vegetation is abundant

Macrogroup Name Emergent Marsh

Habitat System Name: Laurentian-Acadian Freshwater Marsh \*\*Primary Habitat\*\* Notes: primary

Macrogroup Name Modified-Managed Marsh

Habitat System Name: Modified-Managed Marsh Notes: secondary but may be important where emergent herbacious

and woody vegetation is abundant

Macrogroup Name Wet Meadow-Shrub Marsh

Habitat System Name: Introduced Wetland and Riparian Vegetation \*\*Primary Habitat\*\* Notes: primary

Habitat System Name: Laurentian-Acadian Wet Meadow-Shrub Swamp \*\*Primary Habitat\*\* Notes: primary

Formation Name Grassland & Shrubland

Macrogroup Name Outcrop & Summit Scrub

Habitat System Name: Northern Appalachian-Acadian Rocky Heath Outcrop Notes: secondary as nesting habitat

Macrogroup Name Ruderal Shrubland & Grassland

Habitat System Name: Introduced Shrubland Notes: secondary

Habitat System Name: Powerline Right-of-Way Notes: secondary as nesting habitat

Habitat System Name: Ruderal Upland - Old Field Notes: secondary

Formation Name Northeastern Upland Forest

Macrogroup Name Central Oak-Pine

Habitat System Name: Central Appalachian Dry Oak-Pine Forest Notes: secondary

Habitat System Name: Central Appalachian Pine-Oak Rocky Woodland Notes: secondary

Habitat System Name: North Atlantic Coastal Plain Hardwood Forest Notes: secondary

Habitat System Name: Northeastern Interior Pine Barrens Notes: secondary

Macrogroup Name Exotic Upland Forest

Habitat System Name: Introduced Upland Vegetation - Tree Notes: secondary

Macrogroup Name Northern Hardwood & Conifer

Habitat System Name: Appalachian (Hemlock)-Northern Hardwood Forest Notes: secondary

Habitat System Name: Northeastern Coastal and Interior Pine-Oak Forest Notes: secondary

Macrogroup Name Plantation and Ruderal Forest

Habitat System Name: Managed Tree Plantation Notes: secondary

Habitat System Name: Ruderal Forest - Northern and Central Hardwood and Conifer Notes: secondary

Formation Name Northeastern Wetland Forest

Macrogroup Name Central Hardwood Swamp

Habitat System Name: North-Central Interior Wet Flatwoods Notes: secondary

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# **Priority 1 Species of Greatest Conservation Need (SGCN)**

Class: Reptilia (Reptiles)

Order: Testudines (Turtles And Tortoises)

Family: Emydidae (Pond Turtles)

Formation Name Northeastern Wetland Forest

Macrogroup Name Northern Swamp

Habitat System Name: North-Central Appalachian Acidic Swamp \*\*Primary Habitat\*\* Notes: primary

Habitat System Name: North-Central Interior and Appalachian Rich Swamp \*\*Primary Habitat\*\* Notes: primary

## **Stressors Assigned to Blanding's Turtle:**

Stressor Priority Level based on Severity and Actionability

	Moderate Severity	High Severity
Highly Actionable	Medium-High	High
Moderately Actionable	Medium	Medium-High
Actionable with Difficulty	Low	Low

IUCN Level 1 Threat Biological Resource Use

IUCN Level 2 Threat: Logging and Wood Harvesting

Severity: Moderate Severity Actionability: Highly actionable

**Notes:** Forestry operations could negatively effect populations by direct mortality from skidders etc during

spring/summer or by altering forested wetland habitat

IUCN Level 1 Threat Residential and Commercial Development

**IUCN Level 2 Threat:** Commercial and Industrial Areas

**Severity:** Severe **Actionability:** Moderately actionable

Notes: Habitat loss, degradation, and fragmentation from development and increased human activity

IUCN Level 2 Threat: Housing and Urban Areas

Severity: Severe Actionability: Moderately actionable

Notes: Habitat loss, degradation, and fragmentation from development and increased human activity

IUCN Level 1 Threat Transportation and Service Corridors

IUCN Level 2 Threat: Roads and Railroads

Severity: Severe Actionability: Moderately actionable

Notes: Mortality from vehicle collisions on roads is major threat and roads also contribute to the loss, degradation, and

framentation of habitat

IUCN Level 1 Threat Biological Resource Use

IUCN Level 2 Threat: Fishing and Harvesting of Aquatic Resources

Severity: Moderate Severity Actionability: Moderately actionable

Notes: Poaching and incidental collection

IUCN Level 1 Threat Energy Production and Mining

**IUCN Level 2 Threat:** Mining and Quarrying

**Severity:** Moderate Severity **Actionability:** Moderately actionable

Notes: Development and operation of quarries and gravel can contribute to habitat loss, degradation, and fragmentation

IUCN Level 1 Threat Human Intrusions and Disturbance

IUCN Level 2 Threat: Recreational Activities

Severity: Moderate Severity Actionability: Moderately actionable

Notes: Direct mortality from off-road vehicles is a threat as well as impacts to habitat, particularly nesting habitat

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# **Priority 1 Species of Greatest Conservation Need (SGCN)**

Class: Reptilia (Reptiles)

Order: Testudines (Turtles And Tortoises)

Family: Emydidae (Pond Turtles)

IUCN Level 1 Threat Invasive and Other Problematic Species, Genes and Diseases

IUCN Level 2 Threat: Invasive Non-native-Alien Species-Diseases

Severity: Moderate Severity Actionability: Moderately actionable

Notes: Invasive wetland plants that dominate or form monocultures

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Habitat Shifting or Alteration

**Severity:** Moderate Severity **Actionability:** Actionable with difficulty

Notes: Llimate change for species occupying narrow latitudinal band

## **Species Level Conservation Actions Assigned to Blanding's Turtle:**

\*Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.

Conservation Action Category: Species Management Biological Priority: high Type: on-going

Continue the cautionary road crossing signage program, and expand the number of locations with signs as additional road crossing hotspots are identified.

## Stressor(s) Addressed By This Conservation Action

#### Roads and Railroads

**Conservation Action** Category: Research Biological Priority: critical Type: on-going Identify potential road crossing hotspots using GIS and monitor mortality at those locations with road surveys to prioritize the most problematic road segments for mitigation measures such as cautionary signage, exclusionary fencing, and under-road p

### Stressor(s) Addressed By This Conservation Action

#### Roads and Railroads

Conservation Action Category: Species Management Biological Priority: critical Type: new

Install road crossing structures consisting of under-road passageways and guidance fencing where high-mortality road segments bisect habitat that hosts high priority populations

### Stressor(s) Addressed By This Conservation Action

#### Roads and Railroads

Conservation Action Category: Public Outreach Biological Priority: high Type: on-going

Continue to build public awareness of risks posed by roadways with seasonally appropriate press release that also warns motorists to be on the lookout for turtles during spring/early summer.

### Stressor(s) Addressed By This Conservation Action

#### Roads and Railroads

Conservation Action Category: Habitat Management Biological Priority: high Type: new

Manage and where necessary create nesting habitat to improve viability of high-priority Blanding's turtle populations

## Stressor(s) Addressed By This Conservation Action

#### Commercial and Industrial Areas

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**Priority 1 Species of Greatest Conservation Need (SGCN)** 

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Order: Testudines (Turtles And Tortoises)

Family: Emydidae (Pond Turtles)

Conservation Action Category: Habitat Management Biological Priority: high Type: new

Research and coordinate the development of a publically available Potential Vernal Pool map product that covers the entire

State, or at least all organized townships

## Stressor(s) Addressed By This Conservation Action

## Commercial and Industrial Areas

Conservation Action Category: Policy Biological Priority: moderate Type: on-going

Cooperate with University of Maine and the Maine Department of Environmental Protection to research and implement a voluntary Special Area Management Program (SAMP) by towns that want greater flexibility in the implementation of

### Stressor(s) Addressed By This Conservation Action

Commercial and Industrial Areas

#### **Guild Level Conservation Actions:**

This Species is currently not attributed to a guild.

## **Broad Taxonomic Group Conservation Actions:**

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

#### **Habitat Based Conservation Actions:**

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.